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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,892	06/11/2001	Taro Ogawa	TAK.P.US0029	2745

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EXAMINER	
KILKENNY, TODD J	

ART UNIT	PAPER NUMBER
1733	6

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A56

Office Action Summary	Application No.	Applicant(s)	
	09/857,892	OGAWA ET AL.	
	Examiner	Art Unit	
	Todd J. Kilkenny	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-8 and 11-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-8 and 11-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 8 recites the limitation "said binder" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 3 does not recite a binder.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11, 13 -15 are rejected under 35 U.S.C. 102(b) as being anticipated by Takashi et al (JP 08258059)[1].

Takashi et al teach the production of skin material integrally molded seat member and disclose an apparatus used in this production.

As to independent claim 11, the form block (6) of Takashi et al reads on applicant's claimed molding container, which forms an inverted shaped mushroom

cavity (unlabeled) for shaping and filling skin layer (4). Referring to Figure 3, the form block includes a top opening (unlabeled) defined between the two side flanges. This opening is taken to anticipate applicant's "supply port" to which the opening of the skin layer is further fitted. Referring again to Figure 3, the container also comprises an air suction hole (10) that is connected to a vacuum pump, which anticipates applicant's "suction port" and "pumping source". Additionally, referring to Figures 4 and 5, the container of Takashi et al includes a lid mold (9), which is movable between an open position (Figure 4) and a closed position (Figure 5). Said lid mold (9) anticipates applicant's "sliding block".

As to claim 13, Takashi et al further suggest a pipe (12) and steam blow down holes (11) in the lid mold (9) to introduce steam to the filler.

As to independent claim 14, the form block (6) including the inner space directly below the air suction mouth (10') as diagrammed in Figure 2 defines a padding container having an air suction tube (10; applicant's "suction port") connected to the inner space. The medium tube (8) used for filling is taken to anticipate applicant's claimed "supply port". The molding cavity formed in the form block is taken to read on applicant's claimed "premolding container", which also comprises an entry (unlabeled, but defined between the two flanges) for supplying the filler as it is fitted with the opening of said skin layer bag. Lastly, air suction mouth holes (10') anticipate applicant's "at least one hole".

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[1] Partial English translation of document obtained through http://www.ipdl.jpo.go.jp/homepg_e.ipdl.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3 – 8, 12, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi et al (JP 08-258059) in view of Hughes (US 5,132,063).

As to independent claim 3, in Figure 3, Takashi et al disclose preparing a skin layer formed in a bag shape with an opening for supplying form chip (5). The skin is prepared in a form block (6; "padding container"), which includes an inner space, an air suction tube (10; "suction port") and an opening (unlabeled, but recognized as the opening positioned between the top flanges of the form block and reads on "supply port"). Takashi et al further teach a vacuum source connected to said air suction tube and suggest suction fabrication to shape the skin layer to conform to the dimensions of the cavity.

It is unclear if the skin layer includes a porous part and if the vacuum source provides airflow to the inside of the skin layer to help supply the form chip (5).

Hughes teaches a process for manufacturing a padded element and suggests that the process does away with the need to use trim cover material having the air and/or foam-impervious layer. As diagrammed in the embodiment of Figure 4, the air pervious fabric is placed in a mold and vacuum means is used to retain the trim cover in

place. Furthermore, Hughes suggests the foam layers expansion in the mold to the trim cover may be assisted by the vacuum applied to the chamber as denoted by the arrows.

It therefore would have been obvious to one of ordinary skill in the art at the time of the invention to provide the vacuum of Takashi et al not only to position and retain the skin layer in the mold, but to further provide suction through the skin layer to aid in the supplying and expanding the foam chips in the cavity of the form block, wherein as further evidenced by Hughes the use of a fabric layer without an air impervious barrier is known in mold processes for manufacturing padded elements.

As to claim 4, Takashi et al suggest a binder provided with the form chip (5). Referring to Figure 5, the form chip body (5) is recognized as being set in a molding cavity defined by the form block (6) and the lowered lid mold (9). Takashi et al teach introducing steam to the cavity to unify the skin layer and form chip (5) together.

As to claim 5, Takashi et al in view of Hughes is taken to render obvious the limitations of claim 3 further presented by claim 5 as discussed above. As to the additional limitations directed to a slide block, the lid mold (9) of Takashi et al is taken to read on applicant's claimed slide block, wherein said slide block is movable between an open position (Figure 4) and a closed position (Figure 5), and wherein steam is passed to the molding cavity after moving the lid mold (9) into its closed position.

As to claim 6, as addressed in the 102(b) rejection against the apparatus of claim 14, referring to Figure 4 of Takashi et al, with the medium tube (8) positioned on the form block (6), the entire unit as diagrammed is taken to read on applicant's "suction container", which includes an inner space directly below the air suction mouth (10')

having an air suction tube (10; applicant's "output port") connected to the inner space. The medium tube (8) used for filling is taken to anticipate applicant's claimed "input port". The form block (6) is therefore taken to read on applicant's claimed "premolding container", which also comprises a cavity, air suction mouths (10'; applicant's "suction port") connecting the inner space of the suction container to the cavity and an entry (unlabeled, but defined between the two flanges) which fits to the opening of the skin layer and reads on applicant's "supply port". Again, in view of Hughes as applied against claim 4 rendering obvious an air pervious fabric, one of ordinary skill in the art would have readily appreciated the vacuum to produce airflow from said input port of the suction container to the inside of the skin through the opening and from the inside of the skin layer to the output port through said suction port. In view of Hughes suggesting that a vacuum can produce airflow through the skin layer to help position/expand the filler in the mold cavity, one of ordinary skill in the art at the time of the invention would have readily appreciated the vacuum air flow of Takashi et al would have aided in supplying and positioning the form chips (5) to the inside of the skin layer. Takashi et al teach the remaining limitations of claim 6 as previously addressed in accordance with claim 4.

As to claims 8, 16 and 17, Takashi et al suggest the form chip (5) can be waste material of an elasticity slab of polyurethane foam.

As to claim 12, in view of Hughes disclosing an air pervious fabric placed in a mold and vacuum means employed not only to retain the fabric in place, but also to assist the positioning of the filler as denoted by the arrows in Figure 4, it would have

been obvious to one of ordinary skill in the art at the time of the invention to employ the vacuum source of Takashi et al not only as means to form and retain the skin layer (5) in the cavity, but when employing a porous fabric to also assist in supplying the form chips (5) to the cavity. As to closing said slide block, referring to Figure 5 of Takashi et al, after closing the lid mold (9), the filler is set and forms a padded body corresponding to the shape of the cavity of the mold.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Todd J. Kilkenny** whose telephone number is **(703) 305-6386**. The examiner can normally be reached on Mon - Fri (9 - 5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

TJK

TJK

Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700